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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 09/881,807

Filing Date: June 18, 2001

Appellant(s): ASCIONE ET AL.

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Anthony C. Tridico  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed June 23, 2005 appealing from the Office action  
mailed November 22, 2004.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings, which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

No amendment after final has been filed.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

No evidence is relied upon by the examiner in the rejection of the claims under appeal.

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-2, 6-31, 40-48, 52-57, 61-86, 95-103, 107-112, 116-141, 150-158 and 162-168 are rejected under 35 U.S.C. 103(a) as being unpatentable over Narasimhan (US 6,315,989 B1) in view of Cotteret et al. (US 5,735,908).

Narasimhan et al. (US' 989 B1) teaches an aqueous emulsion composition for coloring or bleaching of hair comprising cationic homopolymers or copolymers derived from acrylic methacrylic acid wherein the monomer units are selected from the group consisting of acrylamide, methylacrylamide, diacetone-acrylamide, acrylamide or methacrylamide substituted on the nitrogen by lower alkyl, alky ester of acrylic acid and methacrylic acid (see col. 15, lines 13-18), wherein the cationic polymers are presented in the amount of 0.1 to 10% by weight which overlapped with the claimed percentage amounts as claimed in claims 40-42 (see col. 14, lines 35-37), Fatty alcohols of cetearyl alcohol in the percentage amount of 4% which falls within the claimed range as claimed in claims 17-21 and 43-45 (see col. 5, lines 1-6 and col. 17, Example 3), alkoxylated fatty alcohols that comprises aliphatic alcohols and ethylene oxides such as steareth, ceteth, glyceryl ethers and glyceryl esters which are similar to alkoxylated fatty alcohols as claimed in claims 22-31( see col. 5, lines 56-67 and col. 6, lines 24-57), wherein the alkoxylated fatty alcohols such as steareth-21, presented in the percentage amount of 1.0 % which falls within the claimed percentage ranges as claimed in claims 46-48 (see col. 17, Example 3), fatty acid amides (see col. 7, lines 30-34) and hydrogen peroxide as an oxidizing agent in the percentage amount of 1 to 35% which is overlapped with the claimed ranges as claimed in claims 1 and 52-54 (see col. 3, lines 25-29), other adjuvant such as chelating agents as

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claimed in claim 55 (see col. 13, line 58). Narasimhan et al. (US' 989 B1) also teaches methods for treating hair similar to those claimed in claims 57, 72-86, 95-103, 107-112, 127-141, 150-158 and 162-165 when the reference's methods comprise applying to the hair the aqueous emulsion composition as described above (see col. 15, line 40-67 and col. 16, lines 1-3).

Although Narasimhan et al. (US' 989 B1) generally teaches the cationic homopolymers or copolymers derived from acrylic methacrylic acid wherein the monomer units are selected from the group consisting of acrylamide, methylacrylamide, diacetone-acrylamide, acrylamide or methacrylamide substituted on the nitrogen by lower alkyl, alky ester of acrylic acid and methacrylic acid, the reference does not teach or disclose at least one cationic homopolymer comprising the repeating units of the claimed formula (I).

Cotteret et al. (US' 908) teaches in analogous art of hair dyeing compositions, a composition comprising a cationic polymer of polyquaternium 37 (see col. 3, lines 50-51), which is further described in the literature, in particular in US. Patent No. 5,958,397 at col. 11, the disclosure of which is incorporated herein by reference, wherein the cationic homopolymer of quaternium 37 having a formula similar to the claimed formula (I), when in the claimed formula (I), R1 and R2 are hydrogen atoms, R3 is a methyl radical and R4 is a quaternary amino group having  $(CH_3)_3N^+ - CH_2 -$  as claimed in claims 1-2, 6-16, 57, 61-71, 110 and 116-126. Cotteret et al. (US' 908) also teaches a kit for dyeing hair, which is similar to the kit as claimed in claims 166-168 (see col. 11, claim 23, and col. 12, claim 24-25).

Therefore, in view of the teaching of the secondary reference, one having ordinary skill in the art at the time the invention was made would be motivated to modify the composition of the primary reference of Narasimhan (US 6,315,989 B1) by incorporating the cationic polymer of

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polyquaternium 37 as taught by Cotteret et al. (US' 908) with a reasonable expectation of success. Such modification would be obvious because the primary reference of Narasimhan et al, suggests the use of cationic polymers in the dyeing composition as conditioning agents (see col. 14, line 34) and the secondary reference of Cotteret et al. (US' 908), clearly teaches the polymer of polyquaternium 37 which is structurally similar to those claimed, and, thus, a person of an ordinary skill in the art would be motivated to use the polymer of polyquaternium 37 in the composition of Narasimhan (US' 989 B1) with a reasonable expectation of achieving successful composition for dyeing hair, and would expect such a composition to have similar properties to those claimed, absent unexpected results. Further, the similarities in chemical structure between the prior art and the claimed compounds and which have similar utilities establishes a prima facie case of obviousness. (In re Payne, 203VSPQ 245).

Claims 32-39, 49-51, 87-94, 104-106, 142-149 and 159-161 are rejected under 35 U.S.C. 103(a) as being unpatentable over Narasimhan (US 6,315,989 B1) in view of Cotteret et al. (US 5,735,908) and further in view of Casperson et al. (US 6,156,076).

Although the disclosures of Narasimhan (US' 989 B1) and Cotteret et al. (US' 908), as described above, teach and suggest the use of alkoxylated fatty alcohols such as steareth, ceteth and steraeth and fatty amides such as alkyl methylglucamides in the dyeing compositions (see col. 5, lines 56-64 and col. 7, lines 30-33 of US 6,315,989 B1) and alkoxylated fatty alcohols such as cetylstearyl alcohol and fatty amide of linoleic acid (see col. 9, Example 3, of US 5,735,908), the references do not teach or disclose the claimed species of alkoxylated fatty alcohols and the fatty amide species in the claimed amounts.

Casperson et al. (US' 076) in other analogous art of hair dyeing formulations, teaches a composition comprising alkoxylated fatty alcohol of laureth-23 as claimed in claims 32, 87 and 142 (see col. 10, Example 10 and col. 13, claim 7) and fatty amides of lauramide and cocamide that meet the limitations of claims 33-39, 88-94 and 143-149 (see col. 7, lines 31-37), wherein the amides presented in the amounts of 0.15% to 10% and 1.5% to 5% which fall within or overlapped with the claimed percentage amounts as claimed in claims 49-51, 104-106 and 159-161 (see col. 7, lines 38-41 and col. 10, Example 10).

Therefore, in view of the teaching of the secondary reference of Casperson et al. (US' 076), one having ordinary skill in the art at the time the invention was made would be motivated to modify the composition of the primary reference of Narasimhan (US' 989 B1) by incorporating the species of the alkoxylated fatty alcohol of laureth-23 and fatty amides of lauramide and cocamide in the amounts as taught by Casperson et al. (US' 076) to make such a composition with a reasonable expectation of success. Such modification would be obvious because the primary reference of Narasimhan (US' 989 B1), suggests the use of the genus of alkoxylkated fatty alcohols and fatty amides in the dyeing composition and Casperson et al. (US' 076) as a secondary reference clearly teaches the species of laureth-23 (alkoxylated fatty alcohol) and lauramide and cocamide (fatty amides) in the hair dyeing composition, and, thus, a person of ordinary skill in the art would be motivated to select any of the species of the genus taught by the reference, including those of the claims because an ordinary artisan would have the reasonable expectation that any of the species of the genus would have similar properties and thus, the same use as the genus as a whole and also would optimized the amounts of these

species in the composition in order to get the maximum effective amounts, and, thus, would expect such a composition to have similar properties to those claimed, absent unexpected results.

***Allowable Subject Matter***

Claims 3-5, 58-60 and 113-115 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims, because the prior art of record do not teach or disclose a composition comprising cationic homopolymer with a repeating units of the claimed formula (1), in which all R1, R2 and R3 are chosen from alkyl, alkenyl groups or all R1, R2 and R3 are chosen from hydrogen atoms as claimed.

**(10) Response to Argument**

The examiner has reviewed Appellant's arguments based upon the rejection of claims 1, 2, 6-31, 40-48, 52-57, 61-86, 95-103, 107-112, 116-141, 150-158 and 162-168 under 35 U.S.C. 103(a) over Narasimhan (US' 989 B1) in view of Cotteret et al. (US' 908) and respectfully disagrees with counsel's allegations. Specifically, appellants argue that the rejection of record fails to set forth a *prima facie* case of obviousness because the examiner has failed to show the reasons that the skilled artisan, confronted with the same problems as the inventor and with no knowledge of the claimed invention, would select the elements from cited prior art references for combination in the manner claimed. The appellants also argue that only with hindsight would one of ordinary skill in the art combine the teachings of Narasimhan and Cotteret because there is no disclosure in Cotteret or Narasimhan that indicates that polyquaternary-37 or any other cationic homopolymer comprising repeating units of formula (I), is especially desirable. The appellants further, argue that selecting the claimed ingredients (B) to (E) from Narasimhan

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amounts to hindsight picking and choosing because the office provides no rationale for selecting the claimed ingredients (B) to (E) from Narasimhan.

The examiner's position is that the arguments are not found persuasive because of the following reasons.

The examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention wherein there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

In this case Narasimhan et al. (US' 989 B1) as a primary reference, teaches an aqueous phase composition comprising hydrogen peroxide (oxidizing agent) as a main component with other optional components (see col. 3, line 8-60) and an oil phase comprising main components of fatty alcohols (see col. 5, line 1) and surface active ingredients (surfactants) of fatty alcohol derivatives such as alkoxylated fatty alcohols (see col. 5, lines 56-67) and fatty amides (see col. 7, lines 30-34) that are capable of interacting with the aqueous phase and oil phase to form the hair coloring or lightening aqueous dispersion composition (see col. 3, lines 1-6). Narasimhan et al. also teaches and discloses the use of the cationic homopolymer as one of the genus cationic polymers that used in hair treating composition as conditioning polymers (see col. 14, line 34) wherein the cationic homopolymers are derived from acrylic methacrylic acid and wherein the monomer units of these cationic homopolymers are selected from acrylamide or methylacrylamide (see col. 15, lines 13-18). Cotteret et al. (US' 908) as a secondary reference in

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analogous art of hair treating formulation, clearly teaches the species polyquaternium 37 (see col. 3, lines 50-51) as one of the cationic polymers having ability to be deposited on keratin fibers, in particular human keratin fibers such as hair and wherein these cationic polymers are previously described in the literature (see col. 3, lines 26-33) in particular in US. Patent No. 5,958,397, at col. 11, the disclosure of which is incorporated herein by reference to illustrate the structural formula of cationic homopolymer polyquaternium 37 that taught by Cotteret et al., wherein the cationic homopolymer quaternium 37 having a formula similar to the claimed formula (I), when in the claimed formula (I), R1 and R2 are hydrogen atoms, R3 is a methyl radical and R4 is a quaternary amino group having  $(CH_3)_3N^+-CH_2-$  as claimed.

Therefore, one having ordinary skill in the art would have found it *prima facie* obvious to add the cationic polymers (polyquaternium-37) discussed in Cotteret et al. (US' 908) into the composition of Narasimhan et al. (US' 989 B1) with the reasonable expectation of obtaining all of the advantages discussed in Cotteret. Thus, contrary to the appellants' arguments both motivation or suggestion to combine the references and the requisite reasonable expectation of success are founded in the prior art. *In re Vaeck*, 947 F. 2d 488, 493, 20 USPQ2d 1438, 1442 (Fed. Cir. 1991) (citing *In re Dow Chemical Co.*, 837 F. 2d 469, 473, 5 USPQ2d 1529, 1531 (Fed. Cir. 1988)).

In response to appellant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the

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appellant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). Accordingly, the prior art references themselves as discussed above would have provided the requisite motivation, suggestion or teaching to combine the references and thus would have led one of the ordinary skill in the art to arrive at the appellants' claimed subject matter and, thus, the obviousness is not based upon improper hindsight reasoning as asserted by the appellants.

In response to appellant's argument that selecting the claimed ingredients (b) to (e) from Narasimhan amounts to hindsight picking and choosing, it must be recognized that the composition of Narasimhan et al. (US' 989 B1) required three major components of (A) aqueous hydrogen peroxide (oxidizing agent) (see col. 3, lines 25-29), (B) oil phase (hydrocarbons) including fatty alcohols and fatty alcohol derivatives (see col. 4, lines 45-67 and col. 5, lines 1-7) and (C) surface active ingredients (surfactants) that includes alkoxylated alcohols (see col. 5, lines 23-56) and fatty amide (see col. 7, lines 30-34). Narasimhan et al. (US' 989 B1) clearly teaches that the surface active ingredients (surfactants) are used in the composition for interacting with the water phase and the oil phase to cause the formation of the aqueous dispersion composition (see col. 3, lines 1-6). Thus, the list of aqueous hydrogen peroxide (oxidizing agent), hydrocarbon oils (fatty alcohols) and surface active ingredients (alkoxylated fatty alcohols and fatty amides) taught in the prior art are disclosed to be useful ingredients in formation of a hair coloring or lightening aqueous dispersion composition and are still a reasonable number of main ingredients of the hair treating formulations taught by Narasimhan et al. (US' 989 B1). Therefore, a person of ordinary skill in the art would have selected the disclosed components that include aqueous oxidizing agent (aqueous hydrogen peroxide),

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surface active agents of alkoxylated fatty alcohols and fatty amides as emulsifiers and oil components (fatty alcohols) to formulate a composition having ingredients (b) to (e) to arrive at the appellants' claimed subject matter without picking and choosing.

With respect to the appellant's argument that the examples taught by Narasimhan would lead one of skill in the art away from the claimed combination of ingredients because these examples do not include an alkoxylated fatty alcohol, a fatty amide or the claimed cationic homopolymers, it must be recognized that the use of patents as references is not limited to what the patentees describe as their own inventions or to the problems with which they are concerned. They are part of the literature of the art, relevant for all they contain. "*In re Heck*, 699 F.2d 1331, 1332-33 216 USPQ 1038, 1039 (Fed. Cir. 1983) (quoting *In re Lemelson*, 397 F.2d 1006, 1009, 158 USPQ 275, 277 (CCPA 1968)). Further, a reference may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art, including non-preferred embodiments. *Merck & Co. v. Biocraft Laboratories*, 874 F.2d 804, 807, 10 USPQ2d 1843, 1846 (Fed. Cir. 1989); *In re Fracalossi*, 681 F.2d 792, 794 n.1, 215 USPQ 569, 570 n.1 (CCPA 1982); *In re Lamberti*, 545 F.2d 747, 750, 192 USPQ 278, 280 (CCPA 1976); *In re Boe*, 355 F.2d 961, 965, 148 USPQ 507, 510 (CCPA 1966). In this case and as the examiner clearly mentioned above that the teaching of Narasimhan et al. (US' 989 B1) clearly motivated and suggested a person of the ordinary skill in the art to formulate a composition that made by mixing aqueous hydrogen peroxide with a hydrocarbon oil (fatty alcohols) using alkoxylated alcohols and fatty amides as emulsifiers to interact with the aqueous phase and the oil phase to form the aqueous dispersion composition.

The examiner has reviewed Appellant's arguments based upon the rejection of claims 32-39, 49-51, 87-94, 104-106, 142-149 and 159-161 under 35 U.S.C. 103(a) over Narasimhan (US' 989 B1) in view of Cotteret et al. (US' 908) and further in view of Casperson et al. (US' 076) and respectfully disagrees with counsel's allegations. Specifically, appellants argue that the rejection of record fails to set forth a prima facie case of obviousness because Casperson et al. (US' 076) does not provide any motivation to include alkoxylated fatty alcohols specifically within the oxidizing composition, let alone include one of the specific compounds recited in claims 32, 87 and 142 because Casperson et al. (US' 076) teaches that the surfactant need not to be included in the oxidizing composition, but instead may be presented in the dye composition and to support this argument, the appellants mentioned col. 4, lines 7-26, especially lines 21-26. Appellants also argue that Casperson et al. (US' 076) use the fatty amides as rheology modifiers and Casperson et al., does not teach any advantage or benefit to include the fatty amide in the oxidizing composition, rather than in the dyeing composition and the appellants conclude that the ordinary artisan would not have been motivated by the teachings of Casperson to include a fatty amide in any oxidizing composition, and certainly not an oxidizing composition within the scope of instant claim at the percentage weight claimed.

The examiner's position is that the arguments are not found persuasive because of the following reasons.

The examiner applied the Art of species/genus relationship as clearly established in MPEP 2144.08, because Narasimhan et al. (US' 989 B1) as a primary reference clearly teaches and suggests the use of the genus alkoxylated fatty alcohols (see col. 5, line 56) and fatty amide (see col. 7, line 30) as the surface active ingredients in a composition for coloring or bleaching

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hair (see col. 1, lines 7-9). Casperson et al. (US' 076) as a secondary reference in analogous art of hair dyeing formulation, clearly teaches and discloses the claimed species Laureth-23 in the amount of 6% by weight as one of the species of the alkoxylated fatty alcohols that recited in claims 32, 87 and 142 (see col. 10, Example 10) and the fatty amides of Lauramide and cocamide species that meet the limitations of claims 33-39, 88-94 and 143-149 (see col. 7, lines 31-37) and wherein the amides presented in the amounts of 0.15% to 10% and 1.5% to 5% which fall within or overlapped with the claimed percentage amounts as claimed in claims 49-51, 104-106 and 159-161 (see col. 7, lines 38-41 and col. 10, Example 10). Thus, there is a clear and sufficient motivation to one having ordinary skill in the art to use the species Laureth-23, Lauramide and cocamide as taught by Casperson et al. (US' 076) in the composition of Narasimhan et al. (US' 989 B1) to arrive at the appellants' claimed subject matter.

With respect to the appellants' arguments that Casperson et al. (US' 076) teaches that the surfactants need not to be included in the oxidizing composition, but instead may be presented in the dye composition, the examiner's position is that the arguments are not found persuasive because Casperson et al. (US' 076) clearly teaches and discloses that the surfactants may be presented in the dye part of the composition, or in the developer (oxidizing composition) part of the composition or in both (see col. 4, lines 21-23 and col. 7, lines 29-31). Thus, there is a clear suggestion that a person of the ordinary skill in the art has a choice to use the surfactants (rheology modifiers) in any part of the composition includes the claimed oxidizing part. Therefore, the rejection of record establishes a prima facie case of obviousness.

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**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

Accordingly, the Office maintains that the Examiner has met the burden to establish the prima facie showing of obviousness. Viewed as a whole, the invention as claimed would have been obvious to one of ordinary skill in the art at the time of the invention.

Finally, the Examiner request that this Board when viewing the evidence as a whole, and lacking any secondary indicia of non-obviousness, affirm the decision of the Examiner in whole.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Eisa Elhilo  
Primary Examiner  
September 4, 2005

Conferees:

Dr. Yogendra Gupta (SPE 1751)

Mr. Pat Ryan (SPE 1745)